

HEREDITARY POSTERIOR POLAR CATARACT*

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THIS report concerns the pathological features in a case of hereditary developmental posterior polar cataract noted in a pedigree previously recorded by the author (Tulloh, 1955). No other report as to the pathology of this condition appears in the literature.

Case Report

A man, aged 38 years, was the eighth member in the fourth generation of the pedigree (IV, 8). Until the age of 18 his vision was good, but it then began to deteriorate so that from the age of 30 he could read only the largest print.

Examination.—On May 15, 1955, the visual acuity was hand-movements with accurate projection in the right eye and 6/18 unaided in the left.

In the right eye there was a shrunken, hypermature cataract, which had largely been absorbed, whilst, in the left, there was the characteristic posterior polar cataract with radiating spokes of opacity in the posterior cortex. It was felt that a needling would suffice for the right eye. This was done on May 16, and repeated on May 19. The corrected visual acuity in the right eye was then 6/6 partly.

On November 11 a left intracapsular extraction was performed and the intact lens and capsule removed for examination. Post-operatively, a corrected visual acuity of 6/6 partly was obtained in the left eye also.

Pathology.—Macroscopic examination showed a somewhat shrunken lens with a circular elevated opacity at the posterior pole and radiating opacities in the posterior cortex (Fig. 1).



FIG. 1.—Lens in its capsule, posterior view, showing posterior polar cataract with radiating opacities in posterior cortex ($\times 6$).

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Histological examination (Figs 2 and 3) revealed that throughout the lens there was loss of the normal fibre architecture, with hyalinization, vacuole formation, and irregularity of the equatorial nuclei. The predominant changes, however, were to be seen at the posterior pole, where there was thinning of the capsule and a localized mound of cataractous lens material, consisting of granular eosinophilic fluid, which extended radially between clefts in the lens lamellae.

There were also to be seen many of the irregular darkly-staining masses sometimes known as Morgagnian globules, and consisting of partly-calcified pul-taceous lens material.

The cataractous mound at the posterior pole had produced a small paracentral posterior lentiglobus, which was not evident clinically, and with which no persistent hyaloid elements were associated.

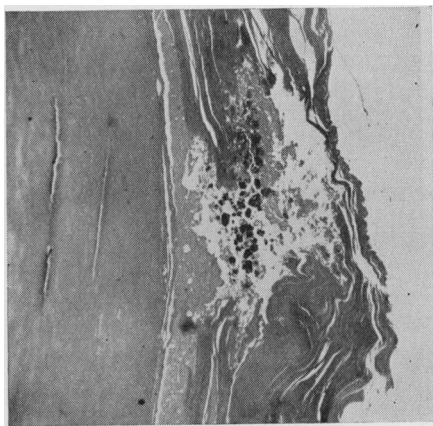
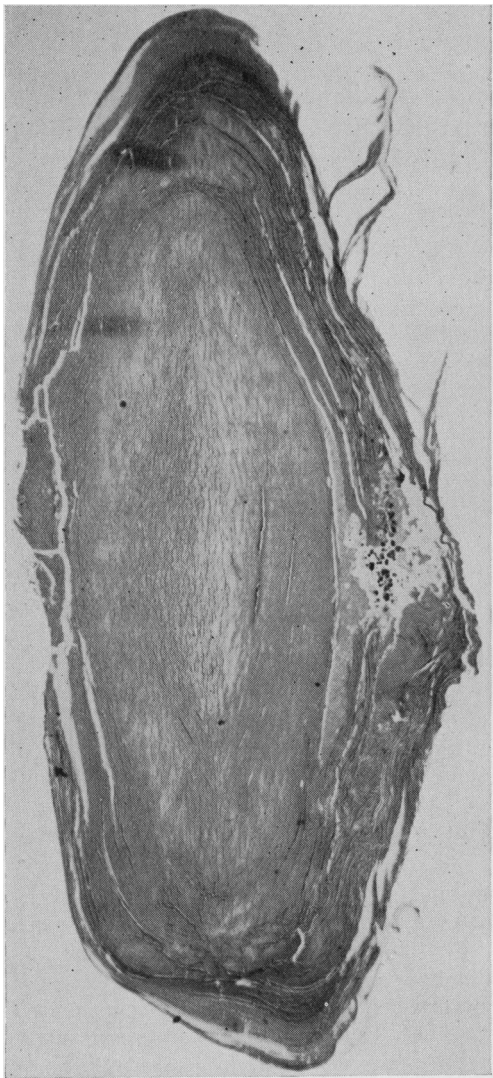


FIG. 3.—Lens, showing cataractous changes at posterior pole with posterior lentiglobus ($\times 30$).

FIG. 2.—Lens, vertical section, showing cataractous changes at posterior pole and in posterior cortex, with posterior lentiglobus ($\times 20$).

My thanks are due to Dr. Norman Ashton for making available to me his pathological report on this case, together with the sections and photographs.

REFERENCE

TULLOH, C. G. (1955). *British Journal of Ophthalmology*, 39, 374.